What is claimed is:

1. A retroreflective photoelectric sensor comprising:

a light-emitting optical system having a light-emitting element, a first polarizer and a light-emitting lens arranged sequentially;

a light-receiving optical system having a light-receiving lens, a second polarizer and a light-receiving element arranged sequentially; and

a phase shifter inserted between said first polarizer and said light-emitting lens;

wherein said first polarizer and said second polarizer have mutually perpendicular polarizer axes.

2. The retroreflective photoelectric sensor of claim 1 further comprising another phase shifter inserted between said second polarizer and said light-receiving lens.

3. The retroreflective photoelectric sensor of claim 2 wherein said phase shifter and said another phase shifter each serve to shift the phase by 3/8-5/8 with respect to the wavelength.

4. The retroreflective photoelectric sensor of claim 2 wherein said light-emitting lens and said light-receiving lens are integrally formed by molding a plastic material.

5. A retroreflective photoelectric sensor comprising:

a light-emitting optical system having a light-emitting element and a first polarizer and serving to transmit light from said light-emitting element through said first polarizer;

a light-receiving optical system having a second polarizer and a light-receiving element and serving to convert light received through said second polarizer into an electrical signal by said light-receiving element;

a single lens for both emitting light from said light-emitting element and receiving light to said light-receiving element therethrough;

a beam splitter serving to direct light received from said light-emitting optical system to said single lens and light received from said single lens to said light-receiving optical system; and

a phase shifter inserted between said first polarizer and said beam splitter;

wherein said first polarizer and said second polarizer have mutually perpendicular polarizer axes.

6. The retroreflective photoelectric sensor of claim 5 further comprising another phase shifter inserted between said second polarizer and said beam splitter.

7. The retroreflective photoelectric sensor of claim 6 wherein said phase shifter and said another phase shifter each serve to shift the phase by 3/8-5/8 with respect to the wavelength.

8. A retroreflective photoelectric sensor comprising:

a light-emitting optical system having a light-emitting element and a first polarizer and serving to transmit light from said light-emitting element through said first polarizer;

a light-receiving optical system having a second polarizer and a light-receiving element and serving to convert light received through said second polarizer into an electrical signal by said light-receiving element;

a single lens for both emitting light from said light-emitting element and receiving light to said light-receiving element therethrough;

a beam splitter serving to direct light received from said light-emitting optical system to said single lens and light received from said single lens to said light-receiving optical system; and

a phase shifter inserted between said beam splitter and said single lens;

wherein said first polarizer and said second polarizer have mutually perpendicular polarizer axes.

9. A retroreflective photoelectric sensor comprising:

a light-emitting optical system having a light-emitting element, a first polarizer and a light-emitting lens arranged sequentially;

a light-receiving optical system having a light-receiving lens, a second polarizer and a light-receiving element arranged sequentially, said first polarizer and said second polarizer having mutually perpendicular polarizer axes; and

means disposed between said first polarizer and said light-emitting lens for canceling the total rotation of the polarization plane that is the sum of rotations caused by passing through said first polarizer and said light-emitting lens.

10. A retroreflective photoelectric sensor comprising:

a light-emitting optical system having a light-emitting element and a first polarizer and serving to transmit light from said light-emitting element through said first polarizer;

a light-receiving optical system having a second polarizer and a light-receiving element and serving to convert light received through said second polarizer into an electrical signal by said light-receiving element, said first polarizer and said second polarizer having mutually perpendicular polarizer axes;

a single lens for both emitting light from said light-emitting element and receiving light to said light-receiving element therethrough;

a beam splitter serving to direct light received from said light-emitting optical system to said single lens and light received from said single lens to said light-receiving optical system; and

means disposed between said first polarizer and said beam splitter for canceling the total rotation of the polarization plane that is the sum of rotations caused by passing through said first polarizer and said light-emitting lens.